The Spotted Owl Observations Database Management Framework

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California Natural Diversity Database
Goal:
• Provide a clear and transparent description of
  • Database
  • Current Practices

Disclaimer:
• Describes current status
• May be updated
SPOWDB Management Framework

Contents

- Background
- Limitations
- Contents
- Activity Centers
- Data Issues, Problem-Solving, and Agency Collaboration
- Availability
- Source Data Acquisition
- Barred Owl
- Updates and Training
Spotted Owl Observations Database

Background

History
• 1973: created by Gordon Gould
• 1992: first referenced in the FPR
• 2003: available in the BIOS Viewer

SPOWDB and the CNDDB
• Fish and Game Code section 1932
• Different data models
  • SPOWDB: Point
  • CNDDB: Polygon
• CNDDB subscription and license agreement
Spotted Owl Observations Database

Background

Centralized location for:

• Submission
• Review
• Reporting

Northern Spotted Owl

California Spotted Owl
Spotted Owl Observations Database

Limitations

• The absence of detection data does not necessarily mean owls are not or have not been present.

• The database should not be used to calculate population trends, abundance, density, etc.

• The database does not track occupancy

• The database does not track barred owl influence

• The database is a starting point
Spotted Owl Observations Database

Definitions

• Observation
  • Positive: Detection
  • Negative: No Response
• Activity Center
  “Best” Observation
• Masterowl Number
• Site Name
• Site
  Area of concentrated or stand-alone observations
• Attribute Table
  Tabular Data
• Metadata
  Information about the dataset
Spotted Owl Observations Database

Contents

• Nest locations
• Bird locations
  • Juveniles
  • Pairs
  • Resident Singles
  • Singles
• Survey locations
  • Call stations
  • Follow-ups
  • Activity center searches
Activity centers are a location or point representing ‘the best of’ detections such as nest stands, stands used by roosting pairs or territorial singles, or concentrated nighttime detections.

1) Nest
2) Nest Stand
3) Daytime Pair
4) Daytime Resident Single
5) Nighttime Pair
6) Multiple Nighttime Single
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Activity Center Status

- Abandonment: Habitat no longer supports territorial owls
- Invalidation: Activity center does not meet the protocol definition

[Map with symbols indicating different observations and status of activity centers]
Spotted Owl Observations Database

Activity Center Status

• Abandonment
  • Federal Guidance
    • YFWO, 2008
    • AFWO, 2017
  • Process
    • Request abandonment through CDFW or CALFIRE
    • Provide:
      • Survey history
      • Current habitat conditions
      • Changes to habitat
      • Barred owl presence
    • CDFW or CALFIRE will request Technical Assistance from USFWS
Spotted Owl Observations Database

Activity Center Status

- Invalidation
  - Historic ACs
  - Process
    - Request site review
    - Provide survey history
    - Database Manager determination:
      - Potentially Valid AC
      - Potentially Invalid AC

- Database manager will consult with USFWS and CDFW
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Data Issues, Collaboration, and Problem-solving

• Addressing Errors
  • Inform the Database Manager of any potential errors
  • Provide support documentation

• Collaboration and Problem-solving
  • Data contributor
  • CDFW regional staff
  • USFWS
  • CALFIRE
  • NSO Interagency Working Group
Spotted Owl Observations Database

Availability

- CNDDDB Subscription
- BIOS Viewer
- Data Download

Monthly CNDDDB Data Download

The CNDDDB and accompanying GIS data are updated and processed monthly for distribution to subscribers. The Spotted Owl Observations Database is continually updated and processed periodically for distribution to subscribers. All CNDDDB subscribers may download these updates. Access to the download site is password controlled; see below for password information. CNDDDB and Spotted Owl dataset components have been compressed into separate, self-executing files. Subscribers with computers running Windows® may use these files to update their CNDDDB and Spotted Owl data.

UPDATE to the CNDDDB GIS Data, August 2012 (PDF)

Jump to Data Portal, or read instructions.

All uses of data from the CNDDDB are subject to the terms and conditions contained in our License Agreement (PDF).

https://wildlife.ca.gov/Data/CNDDDB/Subscribe
Spotted Owl Observations Database

Availability

- Text report

https://wildlife.ca.gov/Data/CNDDB/Subscribe
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Source Data Acquisition

• Necessary Data
  • What was observed?
  • When was it observed?
  • Where was it observed?

• Ways to Contribute
  1. Data entry template – available by request
  2. Contributor format
    • Spreadsheet
    • Shapefile, geodatabase
    • Datasheets and maps
  3. Online CNDDDB Field Survey Form
  4. Plan Number

https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data
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Barred Owl
Spotted Owl Observations Database

Updates

https://www.wildlife.ca.gov/Data/CNDDDB/News
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Training

https://www.wildlife.ca.gov/Data/Training

CNDDB, RareFind and BIOS Tutorials and Training

Introduction Videos and Tutorials

The following training videos and documents provide the basic information needed to get started using the CNDDB, RareFind 5, and BIOS 5:

CNDDB / RareFind 5

- CNDDB Introduction (video - 57 min): An introduction to the California Natural Diversity Database that is essential information for anyone who uses this database. It details what the CNDDB includes, how occurrences are mapped, the ranking systems, the appropriate use of the data, and an introduction to the tools and products that are available.
- RareFind 5 User Guide (PDF): A complete overview of every tool.
- RareFind 5 Demo (video - 24 min): A demonstration of how to query the CNDDB through the RareFind 5 web application.

BIOS 5

- Getting Started in BIOS 5 (PDF): Just the basics to get you going.
- BIOS 5 Demo (video - 18 min): An introduction to the BIOS 5 web mapping application, and a demonstration of how to operate its basic functions.
- Using CNDDB in BIOS 5 (PDF): A demonstration of using the CNDDB dataset in BIOS 5.
- Using the Spotted Owl Report Generator in BIOS 5 (PDF): A demonstration of using the Spotted Owl dataset in BIOS 5 to generate reports.
- CNDDB QuickView Tool User Guide (PDF): A user guide for using the CNDDB QuickView tool in BIOS 5.

Live Training Course

The CNDDB/RareFind/BIOS class is a six-hour course describing the background, purpose, and use of both the CNDDB dataset and the BIOS web-based map viewing tool (which includes access to the CNDDB). The class includes instruction and exercises on using many of the tools in both the online RareFind 5 and in BIOS 5, as well as viewing and querying the CNDDB dataset in BIOS.

Who should attend:

Wildlife and fisheries biologists, botanists, GIS analysts, and others involved with collecting and analyzing biological data and information. Applications include conservation planning, developing study designs, and developing baseline environmental review information. This class is open to people outside of the Department of Fish and Wildlife as well as to CDFW staff. The fee is waived for CDFW staff.

Course Outline:

- CNDDB background, definitions, and proper use
- Online RareFind 5 query tools and reports
- RareFind 5 exercises
- BIOS 5 background, tools, and usage
- BIOS/CNDDB exercises
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Thank You

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